

The Gray tractor started out as a simple orchard tractor developed by a New York fruit grower, W. Chandler Knapp. In 1908, Knapp built a small, twocylinder tractor known as the Knapp Farm Locomotive, which was notable for its two rear-drive wheels that were joined together in order to improve traction. Eventually, the two rear-drive wheels were replaced with a single fully enclosed drum that was driven by a chain. In 1914, the Gray Tractor Manufacturing Co. of Minneapolis bought out Knapp's company and design. The "drum-drive" tractor was renamed the Gray Model A 20-35.

> What set Gray apart from its competitors was the large drum which took the place of rear wheels.



A Gray tractor was present at the Power Farming Demonstration held at Fremont, Nebraska, in 1914. No doubt, the favorable reviews of the Gray were good news to the owners of the company. Although the tractor was developed by Chandler Knapp, he was not interested in pursuing the venture and Gray began the manufacture of the "drum drive" 20-35 with few major changes in Knapp's design.

Several years later, the smaller Model B 15-25 was added to the lineup. In May 1917, the corporation was reorganized for \$2 million and the "Manufacturing" was dropped from the name, making it just "The Gray Tractor Co." This coincided with the 18-36 model, which was built until 1922.

The Gray tractor of 1918 would remain virtually unchanged until the company was reorganized in 1925. Different sizes were built, but the Gray 18-36 seems to have been the most popular. The 18-36 was equipped with a Waukesha fourcylinder engine. From its beginnings, all gears were enclosed, with the exception of the drive chains to the drum. By 1918, the fact the two drive chains were enclosed was an important feature compared to the other tractors of the day.

A final reorganization followed in April of 1925. With this reorganization came the Gray Model 22-40, known as the Canadian Special. The Gray Tractor Company of Canada Limited was headquartered in Winnipeg with distributors in Lethbridge, Calgary, Moose Jaw, and Saskatoon. The parent company built a model especially for the Canadian market as the drum-drive worked well in snowy conditions. It was known as the 22-40 HP Canadian Special and had two non-driving wheels in front with one 54-inch drum at the back. The Canadian Special sold for about \$2,600.

There is some uncertainty about when production ended. Some say 1933, but others say 1935. One writer said production was short-lived because of patent disputes with Caterpillar. Indeed, the drum drive may have been an attempt to bypass Caterpillar patents.

According to company advertising, the drum offered ten advantages: "Simplicity of construction; does away with all bevel gears and differential; distributes weight over a larger surface; avoids packing of the soil and injury to seed bed; ideal for soft and wet land; gives double traction surface; supplies more power to the drawbar; produces a never-slip grip; affords easy steering and turning , and rolls everything flat before plows."

However, the operator seemed almost an afterthought with this design as he found himself dangling on a seat mounted to the right rear corner of the tractor. This was partially alleviated by swinging the seat out from the side of the tractor so the operator sat sideways to the steering wheel and looked over his shoulder to see where he was going.